



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,793	12/08/2005	Akihisa Kobayashi	59559.00024	7512
32294 7590 08/15/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212				
EXAMINER				
BODAWALA, DIMPLE N				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
08/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/559,793

Applicant(s)

KOBAYASHI ET AL.

Examiner

DIMPLE N. BODAWALA

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4 and 5 is/are pending in the application.
4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 4 and 5 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

- Claims 1, 4 and 5 are pending.
- Claims 2 and 3 are cancelled.
- Claims 6-10 are withdrawn.

Response to Amendment

In view of the amendment filed on 5/9/2008 following rejection is maintained as a reason of record from the previous office action mailed on 12/10/2007.

- Rejection of claims 1, 4 and 5 under 35 USC 102(b) as being anticipated by Takizawa (US 6,120,711).

Response to Arguments

1. Applicant's arguments filed on 5/9/2008 have been fully considered but they are not persuasive.
2. Applicant argues that the prior art, Takizawa (US 6,120,711) discloses an invention which comprises a charge start point and a charge end point for the accumulator are set for each of the molding cycles or for each of the steps are constituting a single molding cycle. During the molding, the control is performed such that the charge start point and charge end point are synchronized with each molding cycle. Takizawa further discloses that the charge pressure P_c of the accumulator 2 (which the Office Action interprets

as the "accumulator," recited in claim 1) is measured at the beginning and at the end of every step of molding. Furthermore, Takizawa discloses that a maximum load pressure P_{op} is obtained from load pressures during a single cycle of molding, and that a load pressure P_o is sensed by the pressure sensors 23 and 24 (which the Office Action interprets as the "drive pressuring sensing section," recited in claim 1). Finally, Takizawa discloses that P_d represents the differential pressure of the servo valve 4, and that the differential pressure P_d is added to the maximum load pressure P_{op} to determine the charge pressure P_c . Takizawa discloses a differential pressure P_d , this differential pressure is not calculated based on a minimum charge pressure of the accumulator. Instead the arithmetic operation unit 26 calculates the differential pressure P_d using the formula $P_d = \{(v.S) / (C.A)\} \cdot 2$. Thus, the calculation of the differential pressure in Takizawa is completely independent from any minimum charge pressure of the accumulator.

3. Applicant argues that Takizawa (US 6,120,711) fails to disclose, teach or suggest at least a charge pressure setting process portion which sets the upper limit of the charge pressure on the basis of the pressure difference between the minimum sensed charge pressure of the charge pressure which is sensed and the maximum sensed drive pressure of the drive pressure which is sensed as cited in claim 1 of the instant application.

4. Applicant's all arguments are fully considered but not found persuasive because the amendment of claim 1 of the instant application cites a molding machine having claimed structural limitation such as a charge pressure setting processing portion, wherein such structural limitation of the molding machine cites an intended use as further limit of the claimed subject matter such as to sets the pressure limits. Furthermore, amendment of claim 1 cites structural limitation of the apparatus, does not cite the means-plus-function, therefore, the function of the structural limitation has no patentability weight in apparatus. If prior arts disclose all claimed structural limitations of the molding machine, so the structural limitations of the art are capable to operate in desired functions as required. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530. The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235, 238. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does

not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham, 2 USPQ2d 1647*.

5. Applicants submit that Takizawa fails to disclose or suggest determining a minimum charge pressure of the accumulator. Furthermore, Takizawa fails to disclose or suggest determining a pressure difference based on a minimum charge pressure of the accumulator. This is not found persuasive because the amendment of the claims of the instant application does not cite limitation of minimum charge pressure of the accumulator as Applicant presented in the remarks, filed on 5/9/2008. However, the prior art discloses an invention which measures charge pressure of the accumulator, and, determining the pressure difference is a limitation of an intended use of charge pressure setting processing portion for setting the upper limit of charge pressure. Furthermore, the prior art, Takizawa teaches discloses an injection molding machine with accumulator, wherein accumulator reaches a predetermined lower limit, charging accumulator is started and thus the accumulator reaches a predetermined upper limit (See col.3 lines 2-6), thus, the prior art teaches to determine a minimum charge pressure of the accumulator as a lower limit of the accumulator (See col.3 lines 20-24; col.4 lines 12-25). As we know that the claiming of new use, new function or unknown property which is inherently present in the prior art does not

necessarily make the claim patentable, *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

6. Therefore, the claim is anticipated by the prior art, Takizawa (US 6,120,711), and, thus the rejection of claims over Takizawa (US 6,120,711) is maintained.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 1 is vague and indefinite because it is unclear what is meant by charge pressure setting processing portion. The disclosure cites “pressure adjusting processing means of the control section” (see page 11 of the instant application), but fails to cite “pressure adjusting processing portion” as cited in the amendment of claims of the instant application, filed on 5/9/2008. Appropriate correction is required. It is not quite clear what the “portion” refers to since there is no specific reference to such portion in the specification, and if this is the same as “processing means”.

Claim Rejections - 35 USC § 102

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
11. Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Takizawa (U S Patent No. 6,120,711).
12. Takizawa ('711) discloses an accumulator controller for an injection molding machine which comprises an actuator (3) which is driven by oil supplied thereto (See figure 5; col.2 lines 32-36); an accumulator (2) disposed along an oil passage for supplying oil to the actuator (3) (See figure 5; col.2 lines 42-49); a drive pressure sensing section (23,24) for sensing the drive pressure for driving the actuator (3) (See col.2 lines 50-55); a charge pressure sensing section (22) for sensing the charge pressure of the accumulator (2) (See col.2 lines 50-55); and a charge pressure setting processing means (26) which sets the upper limit of the charge pressure on the basis of the pressure difference between the minimum sensed charge pressure of the charge pressure (Pc) which is sensed and the maximum sensed drive pressure of the drive pressure (Po) which is sensed (See col.3 lines 6-12, 25-30, 36-45).
13. It further teaches that the charge pressure setting means sets the lower limit of the charge pressure on the basis of the upper limit (See col.1 lines 53-60; col.3 lines 46-67 through col.4 lines 1-5).

14. It further teaches that the pressure adjusting processing means (21) which adjusts the charge pressure on the basis of the sensed charge pressure (22-24) and the upper limit and the lower limit (See col.4 lines 5-11).

15. Furthermore, the amendment of claim 1 of the instant application cites a molding machine having claimed structural limitation such as a charge pressure setting processing portion, wherein such structural limitation of the molding machine cites an intended use as further limit of the claimed subject matter such as to sets the pressure limits. Furthermore, amendment of claim 1 cites structural limitation of the apparatus, does not cite the means-plus-function, therefore, the function of the structural limitation has no patentability weight in apparatus. If prior arts disclose all claimed structural limitations of the molding machine, so the structural limitations of the art are capable to operate in desired functions as required. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530. The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235, 238. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666. A

recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham, 2 USPQ2d 1647*.

16. However, the prior art discloses an invention which measures charge pressure of the accumulator, and, determining the pressure difference is a limitation of an intended use of charge pressure setting processing portion for setting the upper limit of charge pressure. Furthermore, the prior art, Takizawa teaches discloses an injection molding machine with accumulator, wherein accumulator reaches a predetermined lower limit, charging accumulator is started and thus the accumulator reaches a predetermined upper limit (See col.3 lines 2-6), thus, the prior art teaches to determine a minimum charge pressure of the accumulator as a lower limit of the accumulator (See col.3 lines 20-24; col.4 lines 12-25). As we know that the claiming of new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable, *In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977)*.

17. Therefore, Takizawa ("711) discloses all claimed structural limitations as discussed above, and, thus, the claims are anticipated.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DIMPLE N. BODAWALA** whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **PHILLIP C. TUCKER** can be reached on (571) 272-

1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dimple N Bodawala
Examiner
Art Unit 1791

/D. N. B./
Examiner, Art Unit 1791

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791